

LIST OF CLAIMS / AMENDMENTS

Claim 24 was previously canceled.

Please amend claims 1, 17-18, 35-36, 46, and 55 as shown herein.

Claims 1-23 and 25-58 are pending and are listed following:

1. (currently amended) An audio generation system, comprising:

an audio processing component configured to generate an audio rendition corresponding to audio wave data derived from multiple audio wave data sources, the audio rendition including an audible playback according to playback instructions;

audio wave track components configured to generate the playback instructions that are routed to the audio processing component to initiate the audio rendition being generated; and

a segment component configured to play the audio wave track components to generate the playback instructions for the audio rendition; and

an audio rendition manager that includes the audio processing component which generates the audio rendition as streams of audio wave data, the audio rendition manager further including audio buffers to process the audio wave data, and logical buses that each correspond to one of the audio buffers, where each of the multiple streams of audio wave data are assigned to one or more of the logical buses such that a logical bus receives one or more of the streams of audio wave data from the audio processing component and routes the streams of audio wave data to the corresponding audio buffer.

1 2. **(original)** An audio generation system as recited in claim 1,
2 further comprising MIDI track components configured to generate event
3 instructions that are routed to the audio processing component to initiate a second
4 audio rendition corresponding to MIDI audio data, and wherein the segment
5 component is further configured to play one or more of the MIDI track
6 components to generate the event instructions.

7
8 3. **(previously presented)** An audio generation system as recited in
9 claim 1, further comprising a segment state that includes programming references
10 to each of the audio wave track components, the segment state configured to
11 initiate that the audio wave track components generate the playback instructions.

12
13 4. **(previously presented)** An audio generation system as recited in
14 claim 1, further comprising one or more segment states that include programming
15 references to each of the audio wave track components, the one or more segment
16 states configured to initiate that the audio wave track components generate the
17 playback instructions such that the audio processing component generates one or
18 more audio renditions corresponding to the audio wave data.

19
20 5. **(previously presented)** An audio generation system as recited in
21 claim 1, further comprising a performance manager that includes one or more
22 segment states, each segment state including programming references to each of
23 the audio wave track components, and each segment state configured to initiate
24 that the audio wave track components generate the playback instructions.
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2 6. **(previously presented)** An audio generation system as recited in
3 claim 1, further comprising one or more performance managers that each include a
4 segment state having programming references to each of the audio wave track
5 components, the segment state configured to initiate that the audio wave track
6 components generate the playback instructions.

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8 7. **(previously presented)** An audio generation system as recited in
9 claim 1, wherein the audio processing component is further configured to receive
10 the playback instructions from the audio wave track components.

11
12 8. **(previously presented)** An audio generation system as recited in
13 claim 1, wherein the audio processing component is a synthesizer component
14 configured to receive the audio wave data from the multiple audio wave data
15 sources, and is further configured to generate the audio rendition in response to the
16 playback instructions.

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18 9. **(previously presented)** An audio generation system as recited in
19 claim 1, further comprising at least a second audio processing component
20 configured to receive the playback instructions from the audio wave track
21 components, the second audio processing component further configured to
22 generate a second audio rendition corresponding to the audio wave data.

1 **10. (original)** An audio generation system as recited in claim 1,
2 wherein the audio wave track components are further configured to maintain the
3 audio wave data as an embedded audio wave data source.

4
5 **11. (original)** An audio generation system as recited in claim 1,
6 wherein the segment component is further configured to maintain the audio wave
7 data as an embedded audio wave data source.

8
9 **12. (previously presented)** An audio generation system as recited in
10 claim 1, wherein the audio wave track components are further configured to
11 randomly select a variation of the audio wave data such that the segment
12 component plays the audio wave track components that correspond to the variation
13 selection.

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15 **13. (previously presented)** An audio generation system as recited in
16 claim 1, wherein the audio wave track components include programming
17 references to variations of the audio wave data, and wherein the audio wave track
18 components are further configured to randomly select a variation of the audio
19 wave data such that the segment component plays the audio wave track
20 components that correspond to the variation.

1 **14. (previously presented)** An audio generation system as recited in
2 claim 1, wherein the segment component is a programming object having an
3 interface that is callable by a software component of the audio generation system
4 to initiate that the segment component play the audio wave track components.

5
6 **15. (previously presented)** An audio generation system as recited in
7 claim 1, wherein the segment component is a programming object having an
8 interface that is callable by a performance manager to initiate that the segment
9 component play the audio wave track components, and wherein the audio wave
10 track components are programming objects each having an interface that is
11 callable by the segment component to initiate that the audio wave track
12 components generate the playback instructions.

1 **16. (original)** An audio generation system as recited in claim 1,
2 wherein the audio wave track components generate the playback instructions to
3 include one or more of the following:

4 one or more programming references to the audio wave data;

5 a start time to initiate the audio rendition being generated;

6 a volume parameter that is a decibel gain applied to the audio wave data;

7 a pitch parameter that identifies an amount that the audio wave data is to be
8 transposed;

9 a variation parameter that identifies whether the audio wave data
10 corresponding to a particular audio wave track component is to be played;

11 a duration parameter that identifies how long audio wave data
12 corresponding to a particular audio wave track component will be played; and

13 a stop play parameter that stops the audio rendition from being generated.
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1 **17. (currently amended)** An audio generation system as recited in
2 claim 1, wherein the audio wave track components are implemented as data
3 structures associated with the segment component, an individual data structure for
4 an audio wave track component including one or more of the following:

5 one or more programming references that identify the audio wave data;

6 a start time that identifies when the audio wave track component is played
7 relative to other audio wave track components;

8 a volume parameter that is a decibel gain applied to the audio wave data;

9 a pitch parameter that identifies an amount that the audio wave data is to be
10 transposed;

11 a variation parameter that identifies whether the audio wave data
12 corresponding to a particular audio wave track component is to be played; and

13 a duration parameter that identifies how long audio wave data
14 corresponding to a particular audio wave track component will be played.
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1 **18. (currently amended)** An audio generation system, comprising:
2 a MIDI track component configured to generate event instructions for MIDI
3 audio data received from a MIDI audio data source;
4 an audio wave track component configured to generate playback
5 instructions for audio wave data received from multiple audio wave data sources;
6 a segment component configured to play the MIDI track component to
7 generate the event instructions, and further configured to play the audio wave
8 track component to generate the playback instructions; ~~and~~
9 an audio processing component configured to receive the event instructions
10 and the playback instructions, and further configured to generate an audio
11 rendition that is an audible playback of the MIDI audio data and the audio wave
12 data; and
13 an audio rendition manager that includes the audio processing component
14 which generates the audio rendition as streams of audio wave data, the audio
15 rendition manager further including audio buffers to process the audio wave data,
16 and logical buses that each correspond to one of the audio buffers, where each of
17 the multiple streams of audio wave data are assigned to one or more of the logical
18 buses such that a logical bus receives one or more of the streams of audio wave
19 data from the audio processing component and routes the streams of audio wave
20 data to the corresponding audio buffer.

21
22 **19. (original)** An audio generation system as recited in claim 18,
23 wherein the segment component includes the MIDI track component and the audio
24 wave track component.
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2 **20. (original)** An audio generation system as recited in claim 18,
3 wherein the segment component includes the MIDI track component, the audio
4 wave track component, and one or more of the following:

5 one or more additional MIDI track components configured to generate
6 additional event instructions for additional MIDI audio data received from one or
7 more MIDI audio data sources; and

8 one or more additional audio wave track components configured to
9 generate additional playback instructions for additional audio wave data
10 maintained in one or more audio wave data sources.

11
12 **21. (original)** An audio generation system as recited in claim 18,
13 further comprising a segment state that includes a first programming reference to
14 the MIDI track component and a second programming reference to the audio wave
15 track component, the segment state configured to initiate that the MIDI track
16 component generate the event instructions, and further configured to initiate that
17 the audio wave track component generate the playback instructions.

1 **22. (original)** An audio generation system as recited in claim 18,
2 further comprising one or more segment states that include a first programming
3 reference to the MIDI track component and a second programming reference to
4 the audio wave track component, the one or more segment states configured to
5 initiate that the MIDI track component generate the event instructions, and further
6 configured to initiate that the audio wave track component generate the playback
7 instructions such that the audio processing component generates one or more
8 audio renditions corresponding to the MIDI audio data and to the audio wave data.

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10 **23. (original)** An audio generation system as recited in claim 18,
11 further comprising a performance manager that includes one or more segment
12 states, each segment state including a first programming reference to the MIDI
13 track component and a second programming reference to the audio wave track
14 component, the one or more segment states configured to initiate that the MIDI
15 track component generate the event instructions, and further configured to initiate
16 that the audio wave track component generate the playback instructions.

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18 **24. (canceled)**

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20 **25. (previously presented)** An audio generation system as recited in
21 claim 18, wherein the audio processing component is a synthesizer component
22 configured to receive the audio wave data from the multiple audio wave data
23 sources.
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1 **26. (previously presented)** An audio generation system as recited in
2 claim 18, further comprising at least a second audio processing component
3 configured to:

4 receive the audio wave data from the multiple audio wave data sources;
5 receive the event instructions and the playback instructions; and
6 generate a second audio rendition that is a second audible playback of the
7 MIDI audio data and to the audio wave data.

8
9 **27. (original)** An audio generation system as recited in claim 18,
10 wherein the audio wave track component is further configured to maintain the
11 audio wave data as an embedded audio wave data source.

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13 **28. (original)** An audio generation system as recited in claim 18,
14 wherein the segment component is further configured to maintain the audio wave
15 data as an embedded audio wave data source.

16
17 **29. (original)** An audio generation system as recited in claim 18,
18 wherein the audio wave track component is further configured to randomly select
19 a variation of the audio wave data when the audio wave track component is
20 played.

1 **30. (original)** An audio generation system as recited in claim 18,
2 wherein the audio wave track component is further configured to randomly select
3 a variation of the audio wave data such that the segment component plays audio
4 wave data in the audio wave track component that corresponds to the variation
5 selection.

6
7 **31. (previously presented)** An audio generation system as recited in
8 claim 18, wherein the audio wave track component includes programming
9 references to variations of the audio wave data maintained in the multiple audio
10 wave data sources, and wherein the audio wave track component is further
11 configured to randomly select a variation of the audio wave data when the audio
12 wave track component is played.

13
14 **32. (original)** An audio generation system as recited in claim 18,
15 wherein the segment component is a programming object having an interface that
16 is callable by a software component of the audio generation system to initiate that
17 the segment component play the MIDI track component and play the audio wave
18 track component.

1 **33. (original)** An audio generation system as recited in claim 18,
2 wherein:

3 the segment component is a programming object having an interface that is
4 callable by a performance manager to initiate that the segment component play the
5 MIDI track component and play the audio wave track component;

6 the MIDI track component is a programming object having an interface that
7 is callable by the segment component to initiate that the MIDI track component
8 generate the event instructions; and

9 the audio wave track component is a programming object having an
10 interface that is callable by the segment component to initiate that the audio wave
11 track component generate the playback instructions.

1 **34. (original)** An audio generation system as recited in claim 18,
2 wherein the audio wave track component generates the playback instructions to
3 include one or more of the following:

4 one or more programming references to the audio wave data;

5 a start time to initiate the audio rendition being generated;

6 a volume parameter that is a decibel gain applied to the audio wave data;

7 a pitch parameter that identifies an amount that the audio wave data is to be
8 transposed;

9 a variation parameter that identifies whether the audio wave data
10 corresponding to the audio wave track component is to be played;

11 a duration parameter that identifies how long audio wave data
12 corresponding to the audio wave track component will be played; and

13 a stop play parameter that stops the audio rendition from being generated.
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1 **35. (currently amended)** An audio generation system as recited in
2 claim 18, wherein the audio wave track component is implemented as a data
3 structure associated with the segment component, the data structure including one
4 or more of the following:

5 one or more programming references that identify the audio wave data;

6 a start time that identifies when the audio wave track component is played
7 relative to the MIDI track component and to other audio wave track components;

8 a volume parameter that is a decibel gain applied to the audio wave data;

9 a pitch parameter that identifies an amount that the audio wave data is to be
10 transposed;

11 a variation parameter that identifies whether the audio wave data
12 corresponding to the audio wave track component is to be played; and

13 a duration parameter that identifies how long audio wave data
14 corresponding to the audio wave track component will be played.

1 **36. (currently amended)** A method, comprising:

2 initiating a segment component to play audio wave track components that
3 generate playback instructions for audible playback of an audio rendition;

4 generating the playback instructions for audio wave data with the audio
5 wave track components, the audio wave data derived from multiple audio wave
6 data sources; and

7 communicating the playback instructions to an audio processing component
8 that generates the audio rendition corresponding to the audio wave data; and

9 instantiating an audio rendition manager that includes the audio processing
10 component which generates the audio rendition as streams of audio wave data, the
11 audio rendition manager further including audio buffers to process the audio wave
12 data, and logical buses that each correspond to one of the audio buffers, where
13 each of the multiple streams of audio wave data are assigned to one or more of the
14 logical buses such that a logical bus receives one or more of the streams of audio
15 wave data from the audio processing component and routes the streams of audio
16 wave data to the corresponding audio buffer.

17
18 **37. (previously presented)** A method as recited in claim 36, further
19 comprising routing the audio wave data to the audio processing component from
20 the multiple audio wave data sources.

21
22 **38. (previously presented)** A method as recited in claim 36, further
23 comprising routing the audio wave data to the audio processing component from
24 the multiple audio wave data sources before generating the playback instructions.
25

1 **39. (previously presented)** A method as recited in claim 36, further
2 comprising instantiating a segment state that initiates the segment component
3 playing the audio wave track components.

4
5 **40. (previously presented)** A method as recited in claim 36, further
6 comprising instantiating multiple segment states that each initiate the segment
7 component playing the audio wave track components, and wherein:

8 generating the playback instructions includes generating playback
9 instructions for each segment state; and

10 communicating the playback instructions includes communicating the
11 playback instructions for each segment state to the audio processing component
12 such that the audio processing component generates multiple audio renditions
13 corresponding to the multiple segment states.

14
15 **41. (previously presented)** A method as recited in claim 36, further
16 comprising selecting a variation number corresponding to one or more variations
17 of the audio wave data, and further comprising playing the audio wave track
18 components corresponding to audio wave data associated with the variation
19 number.

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21 **42. (original)** A method as recited in claim 36, wherein
22 communicating the playback instructions includes communicating the playback
23 instructions to multiple audio processing components that each generate an audio
24 rendition corresponding to the audio wave data.

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2 **43. (original)** A method as recited in claim 36, further comprising:
3 initiating the segment component to play one or more MIDI track
4 components;
5 generating event instructions for MIDI audio data with the one or more
6 MIDI track components; and
7 wherein communicating the playback instructions includes communicating
8 the event instructions to the audio processing component to generate the audio
9 rendition corresponding to the audio wave data and to the MIDI audio data.

10
11 **44. (original)** One or more computer-readable media comprising
12 computer-executable instructions that, when executed, direct an audio generation
13 system to perform the method of claim 36.

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15 **45. (original)** One or more computer-readable media comprising
16 computer-executable instructions that, when executed, direct an audio generation
17 system to perform the method of claim 43.

1 **46. (currently amended)** A method, comprising:
2 generating playback instructions for audio wave data with an audio wave
3 track component;
4 generating event instructions for MIDI audio data with a MIDI track
5 component;
6 communicating the playback instructions and the event instructions to an
7 audio processing component that generates an audio rendition which is an audible
8 playback of the audio wave data and the MIDI audio data; and
9 instantiating an audio rendition manager that includes the audio processing
10 component which generates the audio rendition as streams of audio wave data, the
11 audio rendition manager further including audio buffers to process the audio wave
12 data, and logical buses that each correspond to one of the audio buffers, where
13 each of the multiple streams of audio wave data are assigned to one or more of the
14 logical buses such that a logical bus receives one or more of the streams of audio
15 wave data from the audio processing component and routes the streams of audio
16 wave data to the corresponding audio buffer.

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18 **47. (original)** A method as recited in claim 46, further comprising
19 requesting an allocation of logical communication paths in the audio processing
20 component to route the playback instructions and the event instructions.

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22 **48. (previously presented)** A method as recited in claim 46, further
23 comprising routing the audio wave data to the audio processing component from
24 multiple audio wave data sources before communicating the playback instructions.
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2 **49. (original)** A method as recited in claim 46, further comprising
3 initiating a segment component to play the audio wave track component and play
4 the MIDI track component such that the audio wave track component generates
5 the playback instructions and the MIDI track component generates the event
6 instructions.

7
8 **50. (original)** A method as recited in claim 49, further comprising
9 instantiating a segment state that initiates the segment component playing the
10 audio wave track component and the MIDI track component.

11
12 **51. (original)** A method as recited in claim 46, further comprising
13 selecting a variation number corresponding to one or more variations of the audio
14 wave data, and wherein generating the playback instructions includes generating
15 the playback instructions for audio wave data associated with the variation
16 number.

17
18 **52. (previously presented)** A method as recited in claim 46, wherein
19 communicating the playback instructions and the event instructions includes
20 communicating the playback instructions and the event instructions to multiple
21 audio processing components that each generate an audio rendition that is an
22 audible playback of the audio wave data and to the MIDI audio data.

1 **53. (original)** One or more computer-readable media comprising
2 computer-executable instructions that, when executed, direct an audio generation
3 system to perform the method of claim 46.

4
5 **54. (original)** One or more computer-readable media comprising
6 computer-executable instructions that, when executed, direct an audio generation
7 system to perform the method of claim 49.

8
9 **55. (currently amended)** One or more computer-readable media
10 comprising computer-executable instructions that, when executed, direct an audio
11 generation system to perform a method, comprising:

12 playing one or more audio wave track components;

13 playing one or more MIDI track components;

14 generating playback instructions for audio wave data with the one or more
15 audio wave track components;

16 generating event instructions for MIDI audio data with the one or more
17 MIDI track components; and

18 communicating the playback instructions and the event instructions to an
19 audio processing component that generates an audio rendition corresponding to the
20 audio wave data and to the MIDI audio data; and

1 instantiating an audio rendition manager that includes the audio processing
2 component which generates the audio rendition as streams of audio wave data, the
3 audio rendition manager further including audio buffers to process the audio wave
4 data, and logical buses that each correspond to one of the audio buffers, where
5 each of the multiple streams of audio wave data are assigned to one or more of the
6 logical buses such that a logical bus receives one or more of the streams of audio
7 wave data from the audio processing component and routes the streams of audio
8 wave data to the corresponding audio buffer.

9
10 **56. (original)** One or more computer-readable media as recited in
11 claim 55, wherein the method further comprises routing the audio wave data to the
12 audio processing component from one or more audio wave data sources.

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14 **57. (original)** One or more computer-readable media as recited in
15 claim 55, wherein the method further comprises initiating a segment component to
16 play the one or more audio wave track components and play the one or more MIDI
17 track components.

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19 **58. (original)** One or more computer-readable media as recited in
20 claim 57, wherein the method further comprises instantiating a segment state that
21 initiates the segment component to play the one or more audio wave track
22 components and play the one or more MIDI track components.